Amendments to the Claims

This listing of claims will replace all the prior revisions, and listings of claims in this application.

Listing of Claims

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) A method of determining the time t_{HOB} to a desired Height Of Burst (HOB) of a projectile comprising the steps of:

a. determining, through the effect of a sensor on-board the projectile, when the projectile reaches its apogee after launch;

b. measuring the actual time t_a that it takes said projectile to reach ~~its~~ the apogee after launch; and

~~b~~ c. calculating the time to the desired ~~time of burse~~ Height Of Burst t_{HOB} based upon the actual time t_a;

wherein said on-board sensor is one selected from the group consisting of:

accelerometric sensor, gyroscopic sensor, velocity sensor, global positioning sensor, inertial sensor, and MEMs.

8. (Currently Amended) The method of claim 7 wherein the calculating step ~~b~~ c above comprises setting the t_{HOB} as a percentage X% of t_a wherein said percentage is less than 100% and wherein $t_{HOB} = t_a + X\% t_a$

9. (Previously Presented) The method of claim 8 wherein said percentage of t_a is calculated as follows:

if $t_a > 12$ seconds then down leg time = 90% of t_a;

if 12 sec > $t_a > 9$ seconds then down leg time = 70% of t_a;

if 9 sec > $t_a > 7$ seconds then down leg time = 10% of t_a;

if $t_a < 7$ seconds then there may be a malfunction and the projectile should be disabled.

10. (Currently Amended) The method of claim 7 wherein said step ~~b~~ c is calculated as follows:

$$t_{HOB} = t_a + \sqrt{t_a^2 - 2 \times HOB/g + C}$$

where g=9.81 m/sec^2 = 32 ft/sec^2
and C = correction factor.

11. (Previously Presented) The method of claim 10 wherein said correction factor C is calculated as follows:

if $t_a > 12$ seconds then C = 1.0 sec;

if 12 sec > $t_a > 9$ seconds then C =0.75 sec;

if 9 sec > $t_a > 7$ seconds then C = 0.5 sec;

if t_a < 7 seconds then there may be a malfunction and the projectile should be disabled.